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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,097	09/23/2003	William E. Lawton	32250	1842

7590 04/27/2007  
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EXAMINER

SHAN, APRIL YING

ART UNIT PAPER NUMBER

2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/669,097

Applicant(s)

LAWTON ET AL.

Examiner

April Y. Shan

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Applicant's amendment, filed 19 April 2007, has been received, entered into the record, and respectfully and carefully considered.
2. As a result of the amendment, the specification and drawing have been amended. Claims 1-10 are pending for examination.
3. Any objections not repeated below for record are withdrawn due to Applicant's amendment.

### ***Specification***

4. The disclosure is objected to because: on page 1 of the specification, Applicant indicated "the HomePlug 1.01 Specification of the HomePlug Power Alliance, incorporated here by reference". First, the examiner noticed that the Applicant did **not** provide a copy of this reference to the office. Second, the Applicant **cannot** incorporate NPL reference into incorporated by reference. Please see 37 CFR 1.56, 1.57 and MPEP 201.17 for incorporation by reference. Therefore, the examiner will not consider "the HomePlug 1.01 Specification of the HomePlug Power Alliance" as incorporation by reference.

### ***Claim Objections***

5. Claims 1-10 are objected to because of the following informalities:  
For example,

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- a. "DEK" in line 2, claim 1 should be "Device Encryption Key";
- b. "NEK" in line 5, claim 1 should be "Network Encryption Key";

Any claim not specifically addressed, above, is being objected as incorporating the deficiencies of a claim upon which it depends.

Please check the claims 1-10 and correct any informality the Applicant is aware of.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yonge,

III (U.S. Patent 6,987,770)

As per **claim 1**, Yonge, III discloses a method for determining MAC address for a remote device having a known, unique DEK in a network where devices may not send a confirmation to a SetNEK request, the method comprising the steps of:

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preparing a broadcast message with a SetNEK request containing a unique, temporary NEK (col. 33, lines 38-45);

encrypting the message with the DEK of the remote device ("The master station encrypts the frame using the received default key" – e.g. col. 33, lines 44-45 and step 594 in fig. 30);

transmitting the broadcast message ("transmits the encrypted frame to the new station..." – e.g. col. 33, lines 45-50, fig. 29 and step 596 in fig. 30) on a network medium (e.g. transmission medium 14 in fig. 3);

confirming receipt of the temporary NEK by sending a request that requires a response from the remote device which is encrypted with the temporary NEK (col. 33, lines 51-59); and

determining the MAC address of the remote device from the response ("In response to these inputs, it provides...new station address" –e.g. col. 26, lines 44-61, col. 1, lines 40-45, "...a Destination Address (DA) 108... Each address is an IEEE 48-bit MAC address format" – e.g. col. 10, lines 4-9, "upon receipt of this response, the master station utilizes the channel map specified in the response to send the encrypted frame (containing the NEK) to the new station" –e.g. col. 33, lines 59-61).

As per **claim 2**, Yonge, III discloses a method as applied in claim 1. Yonge, III further discloses wherein the remote device is not a member of a network (new station 12e in fig. 29 and col. 33, lines 1-12 and 33-34).

As per **claim 3**, Yonge, III discloses a method as applied in claim 2.

Yonge, III further discloses comprising the step of using the MAC address of the remote device in a unicast transmission to reliably confirm receipt of the temporary NEK (col. 11, line 43).

As per **claim 4**, Yonge, III discloses a method as applied in claim 3.

Yonge, III further discloses comprising the step of using the MAC address of the remote device in a unicast transmission ("unicast transmission"- e.g. col. 10, lines 39-40) containing a SetNEK message with the local NEK (col. 34, lines 11-26).

As per **claim 5**, Yonge, III discloses a method as applied in claim 4.

Yonge, III further discloses comprising the step of using the MAC address of the remote device in an additional unicast transmission which is encrypted with the local NEK, for purposes of confirming receipt of the local NEK (col. 11, line 43).

As per **claim 6**, Yonge, III discloses a method as applied in claim 2.

Yonge, III further discloses using the determined MAC address to reliably send the local NEK (col. 33, lines 59-62); preparing a unicast message to the remote device containing a SetNEK request where the SetNEK request contains a unique, temporary NEK (col. 33, lines 38-45 ); encrypting the unicast message with the DEK of the remote device ("The master station encrypts the frame using

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the received default key” – e.g. col. 33, lines 44-45 and step 594 in fig. 30);  
transmitting the unicast message on the medium (“transmits the encrypted frame to the new station...” – e.g. col. 33, lines 45-50, fig. 29 and step 596 in fig. 30);  
and confirming receipt of the temporary NEK by sending a request that requires a response which is encrypted with the temporary NEK (col. 33, lines 51-59).

As per **claim 7**, Yonge, III discloses a method as applied in claim 1.  
Yonge, III further discloses wherein the network is a powerline network (col. 6, lines 22-24 and fig. 1).

As per **claim 8**, Yonge, III discloses a method as applied in claim 1.  
Yonge, III further discloses wherein the remote devices are implemented according to the HomePlug Powerline Alliance standard (on page 3, Yonge, III cited “HomePlug Powerline Alliance, HomePlug 1.0.1 Specification, Dec. 1, 2001).

As per **claim 9**, Yonge, III discloses a method as applied in claim 1.  
Yonge, III further discloses wherein the request is a request statistics MME and the response is a statistic response MME (col. 15, Table 2 “Request parameters and statistics” and “Parameters and Statistics Response” and col. 18, lines 65- col. 19, line 3).

As per **claim 10**, Yonge, III discloses a method as applied in claim 1.  
Yonge, III further discloses wherein the request is a request channel estimation  
MME and the response is a channel estimation response (col. 33, lines 55-59).

***Response to Arguments***

8. Applicant's arguments filed 19 April 2007, have been respectfully and fully considered but they are not persuasive.

9. The Applicant argues on pages 8-9, "The procedure outlined in Yonge '770...does not teach nor does it suggest determining the MAC address of the [a] device, or a remote device as called for in independent claim 1 as originally presented...Dependent claims 2-9...to distinguish over the cited reference", the examiner respectfully disagrees and maintains the rejection.

First, in col. 1, lines 6-7, Yonge '770 clearly discloses "This invention relates...more particularly, **Medium Access Control (MAC) protocols**."

Second, in col. 1, lines 40-45, Yonge '770 clearly discloses, "...**a destination address an address of the second station** and...destination address....". Further, Yonge '770 discloses in col. 26, lines 44-61, "...provides new station address" and col. 33, lines 59-61 "...to send the encrypted frame (containing the NEK) **to the new station**"

Third, in Fig. 3 and col. 10, lines 4-9, Yonge '770 expressly discloses "...**a Destination Address (DA) 107 and a Source Address (SA) 110. The SA and DA fields (6 bytes each) are the same as the corresponding fields described in the IEEE Std. 802.3. Each address is in an IEEE 48-bit MAC address format**"



Therefore, the Yonge '770 discloses/suggests the remote device address is the MAC address.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

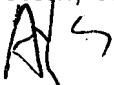
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
20 April 2007  
AYS

  
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